Amendments to the Claims:

The following claims will replace all prior versions of the claims in this application (in the unlikely event that no claims follow herein, the previously pending claims will remain):

1. (Currently Amended) ~~Coated~~ A coated optical fiber comprising a glass optical fiber, a primary coating applied thereon, a secondary coating and optionally an ink composition subsequently applied thereon,

wherein said primary coating is obtained by curing a primary coating composition ~~comprising~~ consisting of:

(a) 20-98% by wt, relative to the total weight of components (a) through (d), of at least one oligomer having a number average molecular weight of about 1000 or higher;

(b) 0-80% by wt, relative to the total weight of components (a) through (d), of one or more reactive diluents;

(c) 0.1-20% by wt, relative to the total weight of components (a) through (d), of one or more photoinitiators for initiation of a radical polymerization reaction; ~~and~~

~~(d) optionally, additives;~~

wherein the primary coating has a storage modulus at 23°C (E'_{23}), has an equilibrium modulus of 1.2 MPa or less, and a cavitation strength at which a tenth cavitation appears (σ^{10}_{cav}) of at least about 1.0 MPa as measured at a deformation rate of 0.20% min^{-1} ~~storage~~, said cavitation strength being at least about 1.4 times said storage modulus at 23°C.

2. (Currently Amended) Primary coating composition when cured having an equilibrium modulus of 1.2 MPa or less, a storage modulus at 23°C (E'_{23}) and a cavitation strength at which a tenth cavitation appears (σ^{10}_{cav}) of at least about 1.0 MPa as measured at a deformation rate of 0.20% min^{-1} ~~storage~~, said cavitation strength being at least about 1.4 times said storage modulus at 23°C, wherein said primary coating composition ~~comprises~~ consists of:

(a) 20-98% by wt, relative to the total weight of components (a) through (d), of at least one oligomer having a number average molecular weight of about 1000 or higher;

(b) 0-80% by wt, relative to the total weight of components (a) through (d), of one or more reactive diluents; and

(c) 0.1-20% by wt, relative to the total weight of components (a) through (d), of one or more photoinitiators for initiation of a radical polymerization reaction~~; and~~

(d) optionally, one or more additives selected from the group consisting of amines, antioxidants, UV absorbers, light stabilizers, silane coupling agents, coating surface improvers, heat polymerization inhibitors, leveling agents, surfactants, colorants, preservatives, plasticizers, lubricants, solvents, fillers, aging preventives, and wettability improvers.

3. (Original) Primary coating composition according to claim 2, wherein the cavitation strength σ^{10}_{cav} is at least about 1.5 times the storage modulus at 23°C.

4. (Previously presented) Primary coating composition according to claim 2 wherein the cavitation strength σ^{10}_{cav} is at least about 1.1 MPa.

5. (Previously presented) Primary coating composition according to claim 2, wherein the composition comprises at least one cross-linking component introducing bimodal distribution into the composition.

6. (Original) Primary coating composition according to claim 5, wherein said cross-linking component is an alkoxylated diol diacrylate.

7. (Currently amended) Method for curing a primary coating composition comprising the steps of

(i) preparing said primary coating composition, which when cured without preflash ~~is having~~ has an equilibrium modulus of 1.2 MPa or less and a cavitation strength at which a tenth cavitation appears (σ^{10}_{cav}) of at least about 0.9 MPa as measured at a deformation rate of 0.20% min^{-1}, said cavitation strength being about 1.0 times or less of its storage modulus at 23°C (E'_{23}), and

(ii) curing said composition with a first dose comprising at least one flash of UV-light of a total energy between about 5 and 50 mJ/cm^2, and

(iii) subsequently curing the pre-cured coating with such a second UV-dose that the pre-cured coating attains at least 85% of its maximum attainable equilibrium modulus; wherein said primary coating composition comprises

(a) 20-98% by wt, relative to the total weight of components (a) through (d), of at least one oligomer having a number average molecular weight of about 1000 or higher;

(b) 0-80% by wt, relative to the total weight of components (a) through (d), of one or more reactive diluents;

(c) 0.1-20% by wt, relative to the total weight of components (a) through (d), of one or more photoinitiators for initiation of a radical polymerization reaction; and

(d) optionally, additives.

8. (Original) Method according to claim 7, wherein said first dose comprises at least one flash of UV-light having a cut-off of the wavelengths below 260 nm.

9. (Currently Amended) Primary coating having an equilibrium modulus of 1.2 MPa or less, wherein said coating, when measured in an uniaxial tensile test and represented in a relative Mooney plot, shows a curve which increases on increasing the strain λ (or lowering $1/\lambda$) and of which at least one part has a value higher than the value calculated by using the function $f(\lambda)$ equal to

$$f(\lambda) = a\frac{L^{-1}\left(\frac{\lambda}{\sqrt{b}}\right) - \lambda^{-\frac{3}{2}}L^{-1}\left(\frac{1}{\sqrt{\lambda}\sqrt{b}}\right)}{\lambda - \frac{1}{\lambda^2}} \qquad (6)$$

or $1/\lambda$ of about 0.60 or less wherein a = 0.94 and b = 11.20; and

wherein said coating is obtained by curing a composition ~~comprising~~ consisting essentially of:

(a) 20-98% by wt, relative to the total weight of components (a) through (d), of at least one oligomer having a number average molecular weight of about 1000 or higher;

(b) 0-80% by wt, relative to the total weight of components (a) through (d), of one or more reactive diluents;

(c) 0.1-20% by wt, relative to the total weight of components (a) through (d), of one or more photoinitiators for initiation of a radical polymerization reaction; and

(d) optionally, one or more additives selected from the group consisting of amines, antioxidants, UV absorbers, light stabilizers, silane coupling agents, coating surface improvers, heat polymerization inhibitors, leveling agents, surfactants, colorants, preservatives, plasticizers, lubricants, solvents, fillers, aging preventives, and wettability improvers.

10. (Original) Primary coating according to claim 9, wherein a = 0.86 and b = 9.85.

11. (Currently Amended) Primary coating having an equilibrium modulus of 1.2 MPa or less, wherein said coating, when measured in an uniaxial tensile test and represented in a relative Mooney plot, shows a curve which increases on lowering $1/\lambda$ and of which at least one part has a value higher than the value calculated by using the function $f(\lambda)$ equal to

$$f(\lambda) = a\frac{L^{-1}\left(\frac{\lambda}{\sqrt{b}}\right) - \lambda^{-\frac{3}{2}}L^{-1}\left(\frac{1}{\sqrt{\lambda}\sqrt{b}}\right)}{\lambda - \frac{1}{\lambda^2}} \qquad (6)$$

for $1/\lambda$ of about 0.60 or less wherein a = 1.17 and b = 15.0 and wherein said coating has a strain energy release rate Go, as measured at a rate of about 1.10^{-5} s^{-1} or less, of higher than $55.0 - 24.0 \times E_{equilibrium}$; and

wherein said coating is obtained by curing a composition ~~comprising~~ consisting essentially of:

(a) 20-98% by wt, relative to the total weight of components (a) through (d), of at least one oligomer having a number average molecular weight of about 1000 or higher;

(b) 0-80% by wt, relative to the total weight of components (a) through (d), of one or more reactive diluents;

(c) 0.1-20% by wt, relative to the total weight of components (a) through (d), of one or more photoinitiators for initiation of a radical polymerization reaction; and

(d) optionally, one or more additives selected from the group consisting of amines, antioxidants, UV absorbers, light stabilizers, silane coupling agents, coating surface improvers, heat polymerization inhibitors, leveling agents, surfactants, colorants, preservatives, plasticizers, lubricants, solvents, fillers, aging preventives, and wettability improvers.

12. (Previously presented) Primary coating according to claim 2, wherein said coating is having a strain energy release rate Go of at least about 20 J/m^2 as measured at a rate of about 1.10^{-5} s^{-1} or less.

13. (Previously presented) Primary coating composition according to claim 9, wherein the composition comprises at least one cross-linking component introducing bimodal distribution into the composition.

14. (Original) Primary coating composition according to claim 13, wherein said cross-linking component is an alkoxylated diol diacrylate.

15. (Currently Amended) Primary coating having an equilibrium modulus of 1.2 MPa or less and a calculated volumetric thermal expansion coefficient α_{23} of about 6.85×10^{-4} K^{-1} or less, wherein said coating is obtained by curing a composition ~~comprising~~ consisting essentially of:

(a) 20-98% by wt, relative to the total weight of components (a) through (d), of at least one oligomer having a number average molecular weight of about 1000 or higher;

(b) 0-80% by wt, relative to the total weight of components (a) through (d), of one or more reactive diluents;

(c) 0.1-20% by wt, relative to the total weight of components (a) through (d), of one or more photoinitiators for initiation of a radical polymerization reaction; and

(d) optionally, one or more additives selected from the group consisting of amines, antioxidants, UV absorbers, light stabilizers, silane coupling agents, coating surface improvers, heat polymerization inhibitors, leveling agents, surfactants, colorants, preservatives, plasticizers, lubricants, solvents, fillers, aging preventives, and wettability improvers.

16. (Previously presented) Primary coating according to claim 2, wherein the equilibrium modulus is about 0.9 MPa or less.

17. (Previously presented) Coating system for an optical glass fiber comprising a primary coating according to claim 2 and a secondary coating having a volumetric thermal expansion coefficient α_{23} of at least about $3.15 \times 10^{-4} K^{-1}$.

18. (Original) Coating system according to claim 17, wherein the secondary coating has a calculated volumetric thermal expansion coefficient α_{23} of about $6.85 \times 10^{-4} K^{-1}$ or less.

19. (Previously presented) Coated optical fiber comprising a glass optical fiber, a primary coating according to claim 2 applied thereon, a secondary coating applied on the primary coating and optionally an ink composition applied on the secondary coating.

20. (Previously presented) Coated optical fiber according to claim 19, wherein said secondary coating has a volumetric thermal expansion coefficient α_{23} of at least about $3.15 \times 10^{-4} K^{-1}$.

21. (Previously presented) Optical fiber ribbon comprising a plurality of coated, and optionally colored optical fibers arranged in a plane and embedded in a matrix composition, wherein the coated optical fiber is a fiber according to claim 19.

22-25. (Cancelled).

26. (Previously presented) The fiber of claim 1, wherein said primary coating composition comprises at least two oligomers, at least one of said at least two oligomers having an average molecular weight that is at least twice the average molecular weight of another oligomer of said at least two oligomers.

27. (Previously presented) The fiber of claim 1, wherein said primary coating composition comprises at least two di- or multifunctional reactive diluents.

28. (Previously presented) The fiber of claim 1, wherein said primary coating composition comprises less than about 10 wt% of monofunctional acrylate having a molecular weight below 500.

29. (Previously presented) The fiber of claim 1, wherein said primary coating composition comprises less than about 5 wt% of monofunctional acrylate having a molecular weight below 500.

30. (Previously presented) The fiber of claim 28, wherein said primary coating composition comprises at least about 1 wt% of monofunctional acrylate having a molecular weight below 500.

31. (New) Coated optical fiber comprising a glass optical fiber, a primary coating applied thereon, a secondary coating and optionally an ink composition subsequently applied thereon,

wherein said primary coating is obtained by curing a primary coating composition consisting essentially of:

(a) 20-98% by wt, relative to the total weight of components (a) through (d), of at least one oligomer having a number average molecular weight of about 1000 or higher;

(b) 0-80% by wt, relative to the total weight of components (a) through (d), of one or more reactive diluents;

(c) 0.1-20% by wt, relative to the total weight of components (a) through (d), of one or more photoinitiators for initiation of a radical polymerization reaction; and

(d) optionally, one or more additives selected from the group consisting of amines, antioxidants, UV absorbers, light stabilizers, silane coupling agents, coating surface improvers, heat polymerization inhibitors, leveling agents, surfactants, colorants, preservatives, plasticizers, lubricants, solvents, fillers aging preventives, and wettability improvers;

wherein the primary coating has a storage modulus at 23°C (E'_{23}), has an equilibrium modulus of 1.2 MPa or less, and a cavitation strength at which a tenth cavitation appears (σ^{10}_{cav}) of at least about 1.0 MPa as measured at a deformation rate of 0.20% min^{-1}, said cavitation strength being at least about 1.4 times said storage modulus at 23°C.

32. (New) Primary coating composition when cured having an equilibrium modulus of 1.2 MPa or less, a storage modulus at 23°C (E'_{23}) and a cavitation strength at which a tenth cavitation appears (σ^{10}_{cav}) of at least about 1.0 MPa as measured at a deformation rate of 0.20% min^{-1}, said cavitation strength being at least about 1.4 times said storage modulus at 23°C, wherein said primary coating composition consists essentially of:

(a) 20-98% by wt, relative to the total weight of components (a) through (d), of at least one oligomer having a number average molecular weight of about 1000 or higher;

(b) 0-80% by wt, relative to the total weight of components (a) through (d), of one or more reactive diluents; and

(c) 0.1-20% by wt, relative to the total weight of components (a) through (d), of one or more photoinitiators for initiation of a radical polymerization reaction.